



# Aquaculture Western Australia: State Forum

What makes for effective industry development?

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# The basic ingredients...

**Competitive Advantage**

Entrepreneurship

Comparative Advantage

Absolute Advantage

**Policy**  
(trade, taxation, infrastructure, R&D, environment etc)

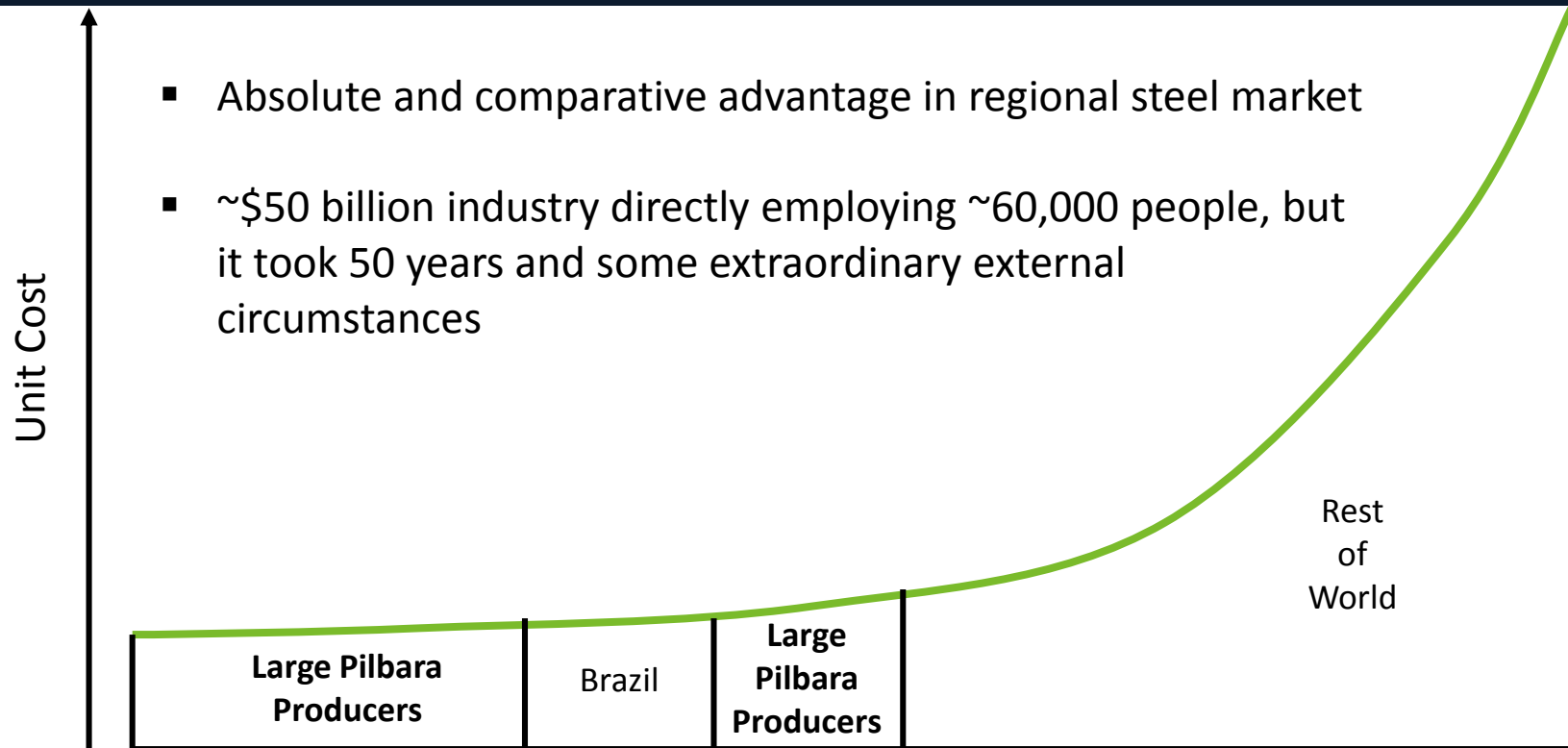
Everything else that delivers competitive advantage

Lower opportunity cost in production than trading partner

Lowest cost Producer in the market



# Case in point: Pilbara iron ore industry...



## Sources of advantage:

- Large and diverse iron ore resource
- Proximity to major global steel manufacturing market
- Very significant long term private investment in infrastructure
- Western Australian Government State Agreements that facilitated the necessary investment in that infrastructure



## What is the resource that might underpin a Western Australian comparative advantage in aquaculture?

- Relatively low nutrient waters
- Vast tracts of coastal open ocean
- Significant climatic variation along the coast
- Native species diversity



# Proximity to Asia is an opportunity, but it is also a double-edged sword when it comes to aquaculture...

Challenges

Opportunities

Highest cost jurisdiction adjacent to lowest cost jurisdiction

Strong domestic and international competition for Asian markets

65 percent of the World's middle-class by 2030

Established trade relationships

Demonstrated appetite for Western Australian produce

**The Asian aquaculture industry possesses absolute and comparative advantage in most aquaculture production**

**In what products and markets can production systems in Western Australia reasonably demonstrate defensible competitive advantage?**



# Infrastructure is arguably the single biggest challenge for Western Australian aquaculture...

- **Basic infrastructure requirements revolves around typical maritime shore-side facilities:**
  - Wharfs, jetty's and landings
  - Low level cargo handling (cranes etc)
  - Laydown areas
  - Serviced sheds and offices
  - *However, this is readily available at only a handful of existing locations along the Western Australian coastline*
  
- **Competent inbound logistics is useful:**
  - Feed is a major cost for most operations and needs to be imported
  - Efficient movement of human resources
  
- **Effective cold-chain connectivity is a major challenge through-out much of regional Western Australia:**
  - Cold chain connectivity into major hubs is key to being competitive in domestic and international seafood markets
  - Tyranny of distance and lack of critical mass of cargo undermines the economics of investment in cold-chain logistics
  - *Need to collaborate with other sectors to get the economics*



# Regional development policy principles...

- Underpinned by foreign trade policy, most contemporary Australian (and therefore Western Australian) industry policy is anchored in principles of *laissez faire*
- Substantive application of policy tools that provide legislated or regulated competitive advantage to domestic industry are rarely considered, and exist either as legacies from historical policy or for extraordinary economic, social or political reasons
- Industry, particularly nascent industry, benefits from direct subsidisation of activities such as R&D, and in many cases, indirect subsidisation through access to infrastructure etc
- The Western Australian aquaculture industry has not been an exception to this:
  - TAFE sector hatchery and applied research infrastructure
  - Department of Fisheries (particularly Fish Health Unit)
  - Strategic and applied R&D and trials
  - Even direct project grants
- **Has certainty of policy, including tenure and application processes, been the missing element?**



# Do we need improved governance of regional development in Western Australia?



- **We are getting better at it, but regionalism is still a big challenge to the political context of regional development in Western Australia**
- We need to work-out how to get smarter at:
  - Identifying competitive advantage at the regional level and targeting investment accordingly; and
  - Coordinating and leveraging infrastructure investment across sectors and across the State
- **A comprehensive State Agribusiness Infrastructure Blueprint is required!**